

## REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and the following remarks.

Claim 12 is currently being amended.

No claims presently are being added.

Claim 32 is requested to be cancelled. Applicants reserve the right to pursue the subject matter of the canceled claims in subsequent divisional applications. The cancellation of claims does not constitute acquiescence in the propriety of any rejection set forth by the Examiner.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

Upon entry of the foregoing amendments, claims 12, 23-31, and 33-34 will remain pending in the application.

It is acknowledged that the foregoing amendments are submitted after final rejection. However, because the amendments do not introduce new matter or raise new issues, and because the amendments either place the application in condition for allowance or at least in better condition for appeal, entry thereof by the Examiner is respectfully requested.

### Interview of December 22, 2003

Applicants would like to thank the Examiner for her time and insights during a telephone conference with Applicants' representative on December 22, 2003. During this telephone conference, the Examiner indicated that claim 12 would be in condition for allowance if this claim was amended as shown above. The Examiner also indicated that similar rejections might be made with respect to claim 32. However, these rejections were not stated during the telephone conference with Applicants' representative.

**Issues Related to Alleged Introduction of New Matter**

**A. Claim 12**

The Examiner asserts that the Amendment dated October 10, 2003 introduces “new matter” because the proposed claims would be drawn to polypeptides comprising fragments of a PTP04 polypeptide that do not have enzymatic activity that are comprised within polypeptides that do have an enzymatic activity of a tyrosine phosphatase. The Examiner asserts that the specification has not defined a genus of PTP04 polypeptides that contain non-PTP04 polypeptide phosphatase catalytic domains. Applicants disagree. The specification provides a description of such a genus. See, for example, pages 52-53. Applicants respectfully request reconsideration and withdrawal of the rejection.

While not acquiescing to the grounds of rejection, Applicants have amended claim 12. Applicants have amended subsections “b” and “c” of claim 12 to recite “an amino acid sequence comprising at least 90% identity to the amino acid sequence set forth in SEQ ID NO: 2, except that it lacks amino acid residues 1-48 of SEQ ID NO: 2” and “an amino acid sequence comprising at least 90% identity to the amino acid sequence set forth in amino acid residues 49-294 of SEQ ID NO: 2,” respectively. Applicants note that the catalytic domain of PTP04 appears within the amino acid sequence set forth in amino acid residues 49-294 of SEQ ID NO: 2. *See, e.g.*, page 52, lines 11-12. Therefore, the sequence of claim 12 possesses an enzymatic activity of a tyrosine phosphatase. Additionally, the specification provides ample disclosure of PTP04 polypeptides that contain non-PTP04 polypeptide phosphatase catalytic domains. *See, e.g.*, the paragraph bridging pages 52 and 53.

B. Claim 32

The Examiner asserts that the specification only teaches SEQ ID NOS: 15, 16 and 17 as examples of peptides to be used in making antibodies specific for a polypeptide comprising SEQ ID NO:2. The Examiner asserts that the specification does not contemplate any polypeptide other than SEQ ID NO:2 itself that comprises the sequences and also possesses an enzymatic activity of a tyrosine phosphatase. Applicants do not agree with the Examiner. However, in order to expedite prosecution, Applicants have canceled claim 32. Applicants reserve the right to pursue the subject matter of the canceled claims in subsequent divisional applications. The cancellation of claims does not constitute acquiescence in the propriety of any rejection set forth by the Examiner.

**Issues Related to Alleged Indefiniteness with Respect to Claim 12**

The Examiner asserts that Applicants' Amendment dated October 10, 2003 fails to address the rejection under 35 U.S.C. § 112, second paragraph, with respect to claim 12, subsection "d", because this subsection was not amended in the same way as subsection "b" was amended to delete the term "full length." Applicants have deleted the term "full length" from claim 12, subsection "b." Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection.

**Issues Related to the Rejections of the Claims Under 35 U.S.C. § 102(a), (b) and (e)**

The Examiner asserts that the Amendment dated October 10, 2003 fails to obviate the rejections of the claims under 35 U.S.C. § 102(a), (b) and (e). Applicants respectfully request reconsideration and withdrawal of the rejection.

With respect to Q93095, the Examiner asserts that because subsection "d" of claim 12 was not amended in the same manner as section "b," the meaning of the limitation of having 90% or 95% identity to full length sequence of SEQ ID NO:2 is unclear. Applicants have amended part "d" of claim 12 to be consistent with part "b."

The Examiner further asserts that claim 12 lacks a recitation of what part of the sequence is to be compared with the prior art. Therefore, the Examiner states that the sequence of Q93095, which comprises amino acids 164-243 of SEQ ID NO:2 satisfies the limitations of section "b" because it is a sequence that lacks amino acid residues 1-48 or 295-807, and it has at least 90% or 95% identity to a part of SEQ ID NO:2. While the sequence of Q93095 may share similarity to amino acids 164-243 of SEQ ID NO:2, the sequence of Q93095 is only 79 amino acids long. The amino acid sequence of claim 12 comprises at least 245 amino acids because it contains the PTP04 catalytic domain which is present in SEQ ID NO:2 at amino acid numbers 49-294. A sequence that is only 79 amino acids long cannot have at least 90% or 95% identity to a sequence that is at least 245 amino acids. Therefore, the sequence of Q93095 does not satisfy the limitations of claim 12.

Turning to the Examiner's assertion that the same analysis would be applied to the teachings of Matthews and Cheng, Applicants note that the sequences of Matthews and Cheng are 31 and 12 amino acids, respectively. A sequence that is only 31 or 12 amino acids long cannot have at least 90% or 95% identity to a sequence that is at least 245 amino acids. Therefore, the sequences of Matthews and Cheng do not satisfy the limitations of claim 12.

## CONCLUSION

Applicants believe that the present application is now in condition for allowance, and request favorable reconsideration thereof.

If the Examiner believes that an interview would advance prosecution of the application, she is invited to contact the undersigned by telephone.

If there are any unaccounted fees due in connection with the filing of this Amendment, please charge the fees to our Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

By 

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